

 the low tax borough	<p align="center">London Borough of Hammersmith & Fulham</p> <p align="center">HEALTH & WELLBEING BOARD</p> <p align="center">4 November 2013</p>
TITLE OF REPORT Update on child oral health improvement initiatives delivered in the London Borough of Hammersmith & Fulham since 2011, including an overview of the 'Keep Smiling Programme,' a school-based outreach programme	
Report of the Interim Director of Public Health	
Open Report	
Classification - For Information Key Decision: No	
Wards Affected: All	
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1. EXECUTIVE SUMMARY

- 1.1. Since the publication in 2011 of the Overview and Scrutiny Committee's Child Oral Health Task Group Report and the North West London Child Oral Health Improvement Strategy, much work has taken place to improve the oral health of children in the London Borough of Hammersmith & Fulham. Highlights include:
- Established a cross-agency Child Oral Health Implementation Group
 - A school-based outreach programme (known as the Keep Smiling Programme), which includes the application of fluoride varnish, supervised brushing sessions using fluoride toothpaste and signposting to local dental practices, was successfully piloted in 5 primary schools and 1 children's centre in White City in 2011/12. This has since been expanded to 6 additional primary schools in the borough during 2012/13 and 2013/14.
 - *Brushing for Life* (the distribution of age-appropriate toothbrushes and toothpaste along with oral health messages by Health Visiting teams at child development reviews) has been re-established.

- New oral health resources have been developed to share consistent, evidence based messages with families around looking after children's teeth and finding an NHS dentist locally.
- Every children's centre has at least one member of staff trained in oral health. Oral health training has also been delivered to Localities Teams, Health Visitors, School Nurses, Family Nurse Partnership and Community Champions (in White City).
- Oral health is linked in with the Healthy Schools Programme commissioned by Tri-borough public health: in order to receive Bronze, schools have to meet objectives around healthy eating and oral health is one of the specialist areas schools can work on to achieve Silver.
- A child oral health day was organised for primary school children across the borough in October 2012: every child received a free toothbrush and toothpaste set, sponsored by Colgate, and a 'brushathon' was held at Queen's Park Ranger's Stadium.

2. RECOMMENDATIONS

- 2.1. That the Board note the continued work that has been undertaken to improve children's oral health within the London Borough of Hammersmith & Fulham since 2011.
- 2.2. That the Board advises on avenues for further engagement around oral health and how GP practices might become more integrated with the child oral health pathway, such as in providing simple oral health messages and signposting to dental practices at immunisation visits; and identifying children more at risk of dental disease and signposting them to appropriate dental services.

3. INTRODUCTION AND BACKGROUND

Introduction

- 3.1. In 2011 the London Borough of Hammersmith & Fulham's Education and Children's Services Select Committee published their Child Oral Health Task Group Report, following concerns about the level of dental disease amongst children in the borough, indicated for example by the National Dental Epidemiology Surveys. The same year, the Dental Public Health Team at NHS North West London published their Child Oral Health Improvement Strategy for North West London. The recommendations made by these two documents were used to develop an action plan to improve children's oral health locally, overseen by a newly established multi-agency Child Oral Health Implementation Group. This provided the opportunity to consolidate existing work programmes and prioritise the development of new initiatives within the borough.
- 3.2. The Dental Public Health Team, on behalf of the Child Oral Health Implementation Group, was asked to provide regular updates to the London Borough of Hammersmith & Fulham Education and Children's Services Select Committee on the implementation of the Children's Oral

Health Task Group's recommendations. At the meeting of 16 April 2013, it was agreed that sufficient progress had been made in implementing the recommendations for future oral health updates to be integrated into the general Public Health updates provided to the committee.

- 3.3. This report provides an overview of the main child oral health improvement initiatives in place within the London Borough of Hammersmith & Fulham and the progress made since 2011. These work programmes contribute to the three domain areas of the Child Oral Health Improvement Strategy:
- Making oral health everybody's business and every contact count
 - Integration of oral health with other Public Health and Children's Programmes
 - Increasing children's exposure to fluoride.
- 3.4. The report begins with a specific update on progress with the Keep Smiling Programme, a school-based oral health outreach programme, which was piloted in White City in 2011/12 and has since been expanded to other schools in the borough.

Background

- 3.5. Despite improvements in children's oral health over the past 30 years, tooth decay remains a significant public health problem, particularly among young children in disadvantaged communities, with the associated dental problems of toothache, abscesses and extractions. The latest survey data (2011/12), for example, show that 28.4% of children within the borough have experience of tooth decay and those children have on average 4 decayed, missing or filled teeth (dmft). Dental caries are the top reason for hospital admissions for children aged 1-18 years in the borough, responsible for 7% admissions. In 5-9 year olds dental caries account for 20% admissions (2010/11 hospital admissions data).
- 3.6. Good oral health is an integral part of general health and well-being. Oral health affects people physically and psychologically and influences how they grow, enjoy life, look, speak, chew, taste food and socialise, as well as their feelings of social well-being.¹ Poor oral health and associated pain and disease can lead to difficulties in eating, sleeping, concentrating and socialising, thereby affecting health-related quality of life with individual and societal consequences.² Often dental treatment for young children (such as extractions of decayed teeth) may only be done under general anaesthetic, which is both distressing for the families concerned and carries a financial burden.
- 3.7. The majority of oral disease, including tooth decay, is preventable. The determinants of oral diseases are known — they are the risk factors

¹ Locker D. Concepts of Oral Health, Disease and the Quality of Life. In: Slade GD, editor. Measuring Oral Health and Quality of Life. Chapel Hill: University of North Carolina, Dental Ecology, 1997, pp. 11-23.

² Department of Health. Choosing Better Health: An Oral Health Plan for England. London: Department of Health Publications, 2005

common to a number of chronic diseases: diet, hygiene, smoking, alcohol, risky behaviours causing injuries, and stress.³ Increased consumption of sugary food and drinks, poor oral hygiene and lack of exposure to fluoride are particular factors which contribute to poor oral health.

- 3.8. The oral health of children has been identified by the Government as a priority area within public health^{4,5,6} and a new public health outcome measure has been developed around tooth decay in children aged 5 years.⁷ This recognises the need for local areas to focus on and prioritise oral health and oral health improvement initiatives (which can be very effective in preventing tooth decay), and supports the work which is on-going within the borough.

4. SUMMARY OF PROGRESS: KEEP SMILING AND OTHER CHILD ORAL HEALTH IMPROVEMENT PROGRAMMES

- 4.1. This update has two sections:
- Keep Smiling Programme (2011/12; 2012/13; 2013/14)
 - Other oral health improvement workstreams (reflecting a consolidation of on-going programmes and new areas of work).

Keep Smiling Programme (Primary Schools)

A. *Keep Smiling: Overview*

- 4.2. Keep Smiling is an evidence-based programme, including the application of fluoride varnish, supervised toothbrushing sessions using fluoride toothpaste and sign posting to dental practices, delivered on an outreach basis to primary school children aged 3-7 years:
- The almost universal use of fluoride toothpaste is one of the main reasons for improvements in oral health over the last thirty years.⁸ Children who start brushing with fluoride toothpastes in infancy are less likely to experience tooth decay than those who start brushing later. It also stimulates healthy dental behaviour from a young age.
 - Fluoride varnish delivery programmes have been shown to be beneficial in reducing tooth decay, based on studies from systematic reviews and randomised controlled trials - fluoride varnish is a concentrated topical fluoride with a resin or synthetic base, designed to

³ Sheiham A. Oral Health, General Health and Quality of Life. Bulletin of the World Health Organization. 2007;83(9)

⁴ Department of Health. The Operating Framework for the NHS in England 2011/12. London: Department of Health, 2010

⁵ Secretary of State for Health. Equity and Excellence: Liberating the NHS. London: Department of Health, 2010

⁶ Secretary of State for Health. Healthy Lives, Healthy People – Our Strategy for Public Health in England. London: Department of Health, 2010

⁷ Department of Health, Improving Outcomes and Supporting Transparency. Part 1: A Public Health Outcomes framework for England, 2013-2016. London: Department of Health, 2012

⁸ Bratthall D, Hansel Petersson G, Sundberg H. Reasons for caries decline: what do the experts believe? European Journal of Oral Sciences. 1996;104:416-22

prolong the contact time between fluoride and dental enamel.^{9,10} A Cochrane Review concluded that the application of fluoride varnish by dental professionals was associated with a 46% reduction in decayed, missing, filled surfaces in children.¹¹ The Department of Health recommends that every child from 3 years has fluoride varnish applied at least twice a year, and 3 times a year if they are at high risk.¹²

- As part of the programme:
 - children take part in two toothbrushing-sessions, and take home a free toothbrush and toothpaste pack with a toothbrushing chart;
 - they receive one application of fluoride varnish, and are signposted to dental practices for future applications, as part of their continuing care;
 - the opportunity is also used to highlight other messages around child oral health, including the importance of reducing sugary food and drink in the diet, and encouraging children to be taken to the dentist for regular check-ups and that NHS dental care is free for children.

4.3. Keep Smiling is a partnership programme:

- During 2011/12 and 2012/13 it was delivered in partnership between the local Primary Care Trust, NHS dental practices, Central London Community Healthcare NHS Trust and the London Borough of Hammersmith & Fulham.
- Due to the new commissioning and delivery landscape within the NHS and Public Health, the programme is currently being delivered in partnership between the London Borough of Hammersmith & Fulham Public Health Team and Central London Community Healthcare NHS Trust, with clinical oversight provided by the Consultant in Dental Public Health at Public Health England.

4.4. As with all child oral health workstreams in the borough, Keep Smiling reports to the borough's Child Oral Health Implementation Group.

B. Keep Smiling 1: 2011-12 White City Pilot

4.5. During early 2012 'Keep Smiling' was piloted in the north of Hammersmith & Fulham (in and around White City). 5 primary schools and 1 children's centre took part in the pilot (Pope John, Old Oak, Canberra, Bentworth, Wormholt Park and Randolph Beresford Early Years Centre).

⁹ Øgard B, Seppä L, Rølla G. Professional Topical Fluoride Applications – Clinical Efficacy and Mechanism of Action. *Adv Dent Res.* 1994;8:190-201

¹⁰ Weintraub J, Ramos-Gomez J, Jue B. et al. Fluoride Varnish Efficacy in Preventing Early Childhood Caries *J Dent Res.* 2006;85(2):172-176

¹¹ Marinho VC, Higgins JP, Logan S, Sheiham A. Topical Fluoride (Toothpastes, Mouth rinses, Gels or Varnishes) for Preventing Dental Caries in Children and Adolescents. *Cochrane Database Syst Rev.* 2003;(4):CD002782

¹² Department of Health (2009) *Delivering Better Oral Health: An Evidence-based Toolkit for Prevention*, 2nd Edition

- 4.6. Uptake for the programme was good, as shown in the table below. Anecdotal evidence from similar fluoride varnish programmes nationally suggests that consent rates tend to range between 40% and 50%.

Table 1: Number and proportion of children across 5 pilot schools taking part in Keep Smiling 2011/12

	Number of children taking part	Proportion of children taking part	Range of uptake of consent across schools
Toothbrushing	698	79%	62% to 97%
Fluoride varnish	604	69%	53% to 90%

- 4.7. A full evaluation of the pilot was conducted by the NHS NWL Dental Public Health Team in 2012. Stakeholders taking part in the evaluation (via interviews, focus groups and surveys) reported that the programme:
- raised awareness of dental health among all stakeholders (including parents, children and school staff);
 - provided children with a unique experience of dental teams in a school setting thereby creating a positive image of dental teams (particularly important for children who had not been to the dentist);
 - the children were seen to enjoy the programme and it was reported that the programme promoted positive health behaviour at home.
- 4.8. Recommendations from the pilot were built into the delivery of the programme in 2012/13.

C. Keep Smiling 2: 2012/13 Expansion of Pilot

- 4.9. Following the success of the White City pilot, it was decided to expand the 3-7 year old programme to additional schools in the centre and south of the borough during 2012/13, whilst also offering to re-visit the original 5 pilot schools to run the programme with their new Nursery and Reception intake.
- 4.10. Three of the original pilot schools (Canberra, Wormholt Park and Ark Bentworth – Keep Smiling 1 schools) and three new primary schools (Flora Gardens, Sir John Lillie and Normand Croft – Keep Smiling 2 schools) took up the offer and the programme was delivered between March and June 2013. The new schools were selected based on the proportion of their children eligible for free school meals, used as a proxy indicator for deprivation, and therefore oral health need.
- 4.11. The uptake of the programme across the 6 schools visited in 2012/13 is shown in the table and chart below. The uptake was similar to the White City Pilot. As in White City, uptake varied by school, and by year group within schools. Consent for fluoride varnish tended to be lower than consent for the toothbrushing sessions, and not all children with consent for fluoride varnish were able to receive it (due to a combination of factors,

including the child being absent, child refusing on the day or due to the child's personal, medical history).

- 4.12. All of the children (911 children) targeted within the programme (irrespective of toothbrushing and fluoride varnish consent) received a 'Healthy Teeth Health Smiles' leaflet with tips for looking after children's teeth; a 'Finding an NHS Dentist in Hammersmith & Fulham' leaflet; information about fluoride varnish; and a toothbrushing chart. In some schools pupils were also involved in classroom activities on oral health which schools organised to reinforce the messages delivered in the programme.

Table 2: Number and proportion of children across the 6 targeted schools taking part in Keep Smiling Programme 2012/13

	Number of children taking part	Proportion of children taking part	Range of uptake of consent across schools
Toothbrushing	632	69%	57% to 94%
Fluoride varnish	448	54%	51% to 93%

Chart 3: Toothbrushing and fluoride varnish activity by school, Keep Smiling Programme 2012/13



Note the chart identifies whether the school was a 'Keep Smiling 1' or 'Keep Smiling 2' school.

- 4.13. The qualitative evaluation of the 2012/13 programme conducted with parents, school and dental staff demonstrated that the programme continues to be valued and seen as benefiting the children who take part. The delivery format is seen to work smoothly, with minimum impact on school staff, and staff involved were keen that the programme continues.
- 4.14. Additional information collected as part of the evaluation for the 2012/13 Keep Smiling programme showed:

- 65% of the 636 returned consent forms reported that children had a dentist. The proportion of children recorded as having a dentist rose with age, with only 55% of nursery children reportedly having a dentist.
- 47 of the 126 children who received a letter after the fluoride varnish application suggesting that they visit a dentist for a dental examination were not recorded as having a dentist, and were possibly being signposted to the dentist for the first time (indicating that possibly without this scheme it may have only been when a child complained of pain that there was a prompt for parents to seek dental care for their child).
- 41 of the 61 parents who responded to the parent evaluation questionnaire had not heard about fluoride varnish prior to the programme. This indicates the role Keep Smiling has in raising awareness of fluoride varnish within the community.

4.15. Recommendations made for the delivery of future programmes included:

- to establish a protocol for following up the children who are given a letter at school as part of the fluoride varnish programme recommending that they attend a dentist for a dental examination – this has been drafted and is currently with the School Nursing Team managers for consideration
- to share with each participating school their class-level data for the number and percentage of children who took part in the programme, to encourage greater uptake in future programmes in particular year groups – this was actioned at the end of 2012/13 and will be continued in 2013/14
- giving each participating school a certificate acknowledging their participation – this was actioned at the end of 2012/13 and will be continued in 2013/14
- visit each school a few days before the start of each programme to check through the consent forms and provide an opportunity to answer any outstanding questions about the programme's delivery prior to the first morning – this has been built into delivery of 2013/14 programme
- contact schools at the start of the school year to ensure maximum planning and promotion time for each school programme – this has been built into delivery of 2013/14 programme
- speak to the 'Tooth Champions' in each of the schools to find out whether they collect information on their school starter forms as to whether children have a dentist and, if not, see if it could be added to existing templates – this has been built into the evaluation of the 2013/14 programme.

D. Keep Smiling 3: 2013/14 Delivery of programme

- 4.16. During 2013/14 the reach of Keep Smiling is being expanded further. Four new schools have been offered the 3-7 year old programme (3 are currently signed up) and the existing eight schools have been offered a Nursery and Reception version of the programme (all are signed up). By the end of 2013/14 we hope to have worked with all of the top 10 primary schools (ranked by % pupils eligible for free school meals).

- 4.17. During September and October the programme was delivered at two of the new primary schools, with consent rates of 63% and 60% for toothbrushing and 59% and 54% for fluoride varnish.

Other child oral health improvement workstreams

- 4.18. This section provides an overview of some of the other initiatives which have been continued/put in place since 2011 and new initiatives planned to improve child oral health in 2013/14.
- 4.19. A multi-agency child oral health implementation group has been established, with representation from: Public Health, Dental Public Health, Oral Health Promotion, Paediatric Specialist Dentistry, Primary Schools, Children's Centres, Early Years Commissioning, Looked After Children, School Nursing/Health Visiting and Localities Team.
- 4.20. *Brushing for Life* (the distribution of age-appropriate toothbrushes and toothpaste along with oral health messages by Health Visiting teams at 9 month and 2 ½ year child development reviews) has been re-established, along with the distribution of free-flowing cups to promote healthy weaning.
- 4.21. A child oral health day was held in October 2012 for primary school children, involving a 'brushathon' at Queen's Park Ranger's Stadium. This was used as an opportunity to celebrate the launch of Keep Smiling and other oral health initiatives in the borough, along with the sharing of key messages around keeping children's teeth healthy. As part of this, every primary school child in the borough received a free toothbrush and toothpaste back with a toothbrushing chart and information on looking after teeth, sponsored by Colgate.
- 4.22. New oral health resources have been developed to share evidence based messages with families around looking after children's teeth and finding an NHS dentist locally. These are distributed by the Oral Health Promotion Team, Health Visiting Team, Localities Teams, Children's Centres and other teams working with families including.
- 4.23. Since March 2013, every children's centre has had at least one member of staff trained in oral health. Work is in progress to develop and consolidate the existing oral health offer for children's centres across the Tri-borough, including training provision, development of tailored oral health resources and oral health sessions, ready for delivery in 2014/15.
- 4.24. Oral health training has also been delivered to Localities Teams, Health Visitors, School Nurses, the Family Nurse Partnership and Community Champions (White City). Following the findings of the early help review in 2013/14, this training offer will be expanded to include wider 'early help' teams including staff within the family recovery programme to promote early recognition of children at greater risk of dental disease and signposting to appropriate dental services.

- 4.25. Oral health is linked in with the Healthy Schools Programme commissioned by Tri-borough public health: in order to receive Bronze, schools have to meet objectives around healthy eating and oral health is one of the specialist areas schools can work on to achieve Silver.
- 4.26. The Specialist Dental Service at CLCH continues to provide dental screening visits and toothbrushing support in the special schools in Hammersmith & Fulham as part of a rolling programme. There is also a toothbrushing club held at White City Health Centre, which the service hopes to develop further once they move to new premises in White City.
- 4.27. Following requests made by Parents Active (an organisation for parents of children with disabilities) the Oral Health Promotion Team in conjunction with the local Specialty Dentist (CLCH) and Consultant in Paediatric Dentistry (Chelsea & Westminster Hospital) have developed a specialist information booklet for use in the service with parents of children with special needs (for example with tailored tips around oral hygiene techniques and resources available). Response from parents sampling the information to-date has been positive.
- 4.28. One area identified for future work is to further the engagement of GP Practices within the child oral health improvement agenda. For example, ensuring that relevant staff are clear how to identify children who would benefit from being referred to the Community Dental Service for specialist dental support, rather than a general dental practice; and exploring the potential for signposting of children to dentists for regular check ups and promotion of fluoride varnish, for example at the 3 year immunisation visit (MMR and pre-school booster). The advice of members of the Board is sought as to the feasibility of this and how it might be delivered.

LOCAL GOVERNMENT ACT 2000

LIST OF BACKGROUND PAPERS USED IN PREPARING THIS REPORT

No.	Description of Background Papers	Name/Ext of holder of file/copy	Department/ Location
1.	The Children's Oral Health Task Group Report	Katie Wright, 0207 641 4654	Public Health, LBHF
2.	North West London, Child Oral Health Improvement Strategy	Katie Wright, 0207 641 4654	Public Health, LBHF
4.	Evaluation Reports for Keep Smiling Programmes in 2011/12 and 2012/13	Katie Wright, 0207 641 4654	Public Health, LBHF